OUTCOME GOAL 3.1 - REDUCE WORKPLACE INJURIES, ILLNESSES, AND FATALITIES

Overview

Reducing workplace injuries, illnesses, and fatalities is a core mission of the Department of Labor. The Act that created the Department in 1913 established as a primary legislative purpose the improvement of working conditions. In that year, the Bureau of Labor Statistics documented approximately 23,000 industrial deaths among a workforce of 38 million, equivalent to a rate of 61 deaths per 100,000 workers. By 1999, the workforce had grown to approximately 135 million and occupational deaths had declined to 6,023 or fewer than five per 100,000 workers. Even with this progress, significant hazards remain for America's workers. In addition to fatal workplace injuries, an estimated 50,000 American workers die each year from illnesses caused by workplace exposures, and six million people suffer non-fatal workplace injuries. Injuries alone cost U.S. businesses over $122 billion annually.

Serving the Public

Through the use of modern technology, substantial progress has been made in the safety and health environment of men and women working in the mining industry. For example, through the Department's efforts in cooperation with industry and equipment manufacturers, large surface equipment has been fitted in recent years with a number of new safety features to reduce the incidence and severity of mine related accidents. Examples of these features include fully enclosed cabs with high-strength windows in a reinforced steel frame, video cameras to improve visibility for operators of large haulage trucks, and two-way emergency communication systems for large surface mobile equipment. Information technology and the Internet provide up-to-date information and analysis for employers, workers, and Mine Safety and Health Administration employees, enhancing their ability to make a difference by reducing the injuries and illnesses suffered by the Nation's mine workers.

The Occupational Safety and Health Administration is making similar use of modern technology by providing employers and employees technical assistance for preventing or eliminating hazards through various means of electronic communication. In recent years, OSHA has developed interactive, online expert systems which elicit information from users and respond with advice on how the Department's regulations apply to the users' situations. A "Technical Advisors" series has been issued addressing various topics covered by OSHA's strategic goals (for example, Silica, Logging, and Lead in Construction). The agency's technical links page on its website also offers information, technical assistance, and other references as part of the broad outreach effort of the Department.

Challenges

The challenge of making progress toward the accomplishment of the Department's mission is affected by a number of factors: the number of workers OSHA is responsible for protecting has expanded dramatically, nearly doubling between 1970, when OSHA was created, and 2000; rapid technological advances and a dynamic workplace environment have changed the nature of work, leading to new health and safety issues; and industry restructuring and global competition have put pressure on employers to reduce costs and increase productivity which may impact safety and health conditions.

REDUCE MINE FATALITIES AND INJURIES

Goal 3.1A: Reduce the number of mine fatalities and non-fatal injuries to below the average for the previous five years.

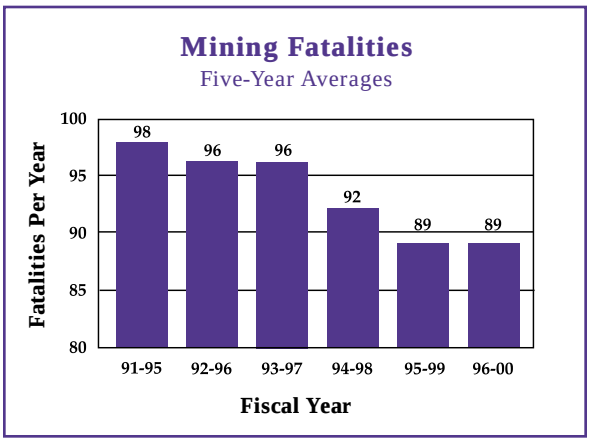
Results: This goal was substantially achieved. Non-fatal accidents and accident injury rates were below the five-year average; the number of fatalities equaled, but did not exceed the five-year average.

Program Description: The Department's Mine Safety and Health Administration (MSHA), through its safety and health enforcement and compliance efforts and in partnership with the American mining community, works to eliminate fatalities and reduce the frequency and severity of accidents in accordance with the Federal Mine Safety and Health Act of 1977.

Analysis of Results:

Fatalities: The number of fatalities in FY 2000 was 89, the same as the FY 1995-1999 baseline average. Based on a five-year moving average, the number of mining fatalities has continued to fall. The average for FY1991-1995 was 98 compared to 89 in FY 1996-2000 -- a reduction of 9 percent. While coal mine fatalities continued on a downward trend, the metal and nonmetal mining sector has shown increasing occurrences of fatalities which rose from 45 in FY 1999 to 55 in FY 2000. Of particular concern are gold mines in Nevada which account for half of the increase, with the remaining half distributed throughout the metal and nonmetal mining industry.

Injuries: The Nonfatal-Days-Lost (NFDL) Injury Incidence Rate (i.e., injuries resulting in a lost work day or restricted activity per 200,000 workhours) of 3.45 is below the baseline rate of 3.82. Based on the five-year average, the number of nonfatal injuries and the nonfatal injury rate continued a downward trend for coal and metal and nonmetal mining. Coal mining continues to have a higher injury rate due to the greater percentage of work hours spent in the more hazardous underground environment.

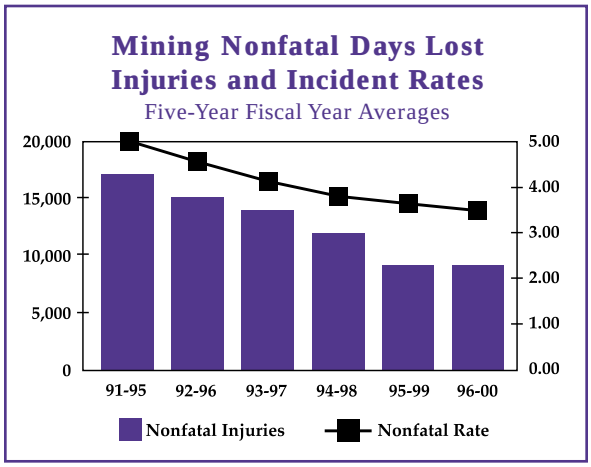


Accident and injury data are accurate and reliable. MSHA receives employment, injury and accident data from mine operators and has an audit program in place to ensure their reliability.

Strategies: Traditionally, DOL has focused efforts on reducing or eliminating the most probable and common causes of injuries and fatalities including explosions, roof

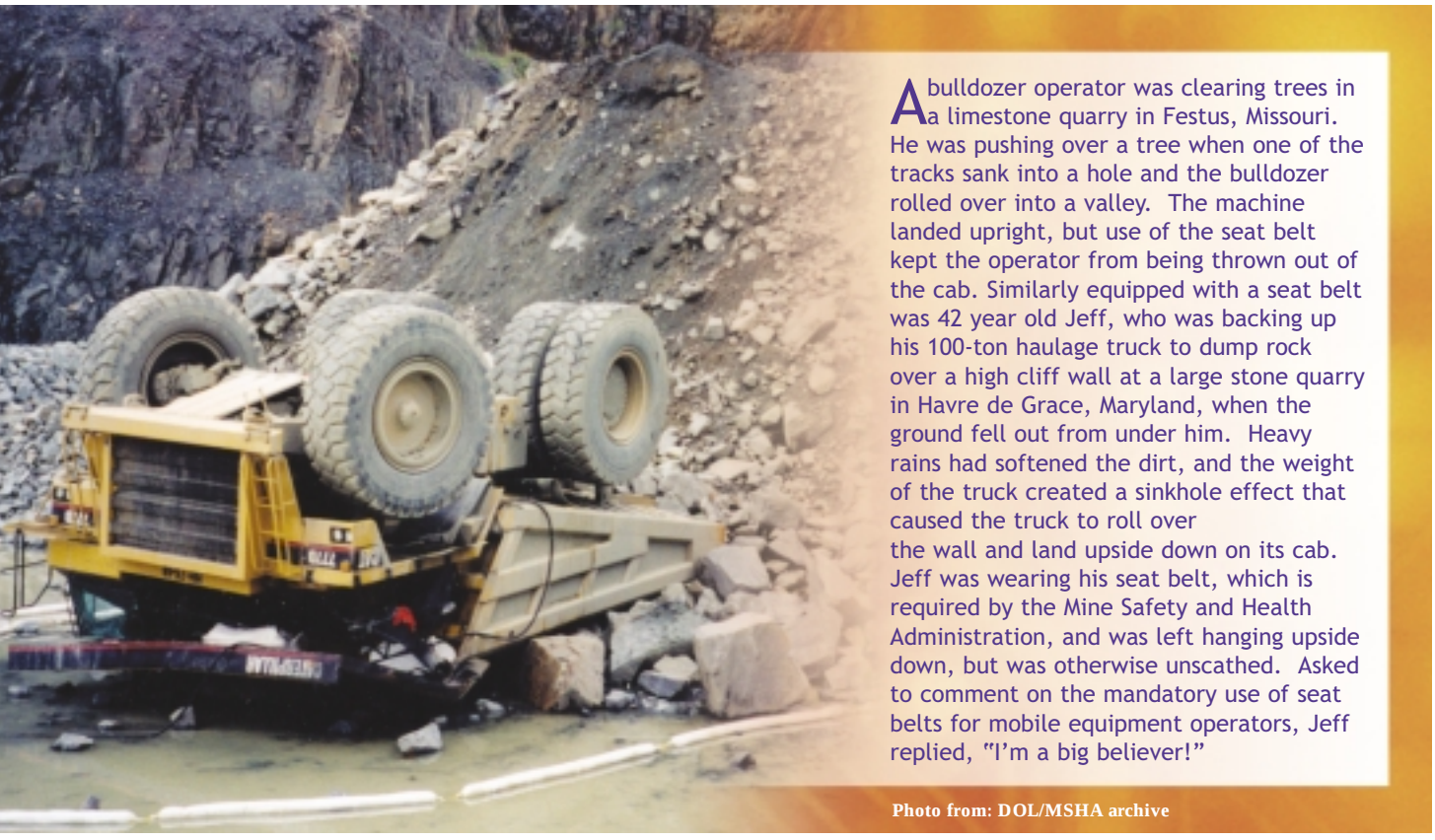
Eighteen miners have been crushed to death in coal stockpiles over the past 20 years, but last year, two bulldozer operators at Indiana and Kentucky mines fell into these dangerous "voids" and came out alive. The men were pushing coal into open chutes at the bottom of stockpiles that dump onto conveyor belts. The process can create hidden cavities, or voids, at the points where the coal is drawn off. Both bulldozers sank into such voids, and were smothered by the loose coal. Thanks to a safety campaign by the Mine Safety and Health Administration (MSHA), the bulldozers had fully enclosed cabs with high-strength windows, which protected the operators from harm.

falls, and equipment accidents. In general, these categories of accidents (and resulting fatalities) have declined. The Department is increasing its focus on analysis of the more unusual factors and events, taking advantage of technology to analyze more variables such as human and environmental causes that have contributed to recent accidents and fatalities. Results of the analysis are being used to focus attention in geographic locations where particular health and safety issues exist, to concentrate efforts on specific safety and health concerns, and to promote awareness. Recently implemented regulations require training for employees of almost 90 percent of the metal and non-metal mines, where approximately 70 percent of the fatal accidents occurred over the past five years.



To combat the increased fatalities in gold mines, the Department has provided technical support for operators regarding roof and ground control; established a training program for miners and operators regarding roof conditions and hazards in gold mining; and assigned full-time resident inspectors at these mines.

Goal Assessment: This performance goal remains in the Department's FY 2001 Annual Performance Plan and will continue to measure results against a five-year moving average. ■



A bulldozer operator was clearing trees in a limestone quarry in Festus, Missouri. He was pushing over a tree when one of the tracks sank into a hole and the bulldozer rolled over into a valley. The machine landed upright, but use of the seat belt kept the operator from being thrown out of the cab. Similarly equipped with a seat belt was 42 year old Jeff, who was backing up his 100-ton haulage truck to dump rock over a high cliff wall at a large stone quarry in Havre de Grace, Maryland, when the ground fell out from under him. Heavy rains had softened the dirt, and the weight of the truck created a sinkhole effect that caused the truck to roll over the wall and land upside down on its cab. Jeff was wearing his seat belt, which is required by the Mine Safety and Health Administration, and was left hanging upside down, but was otherwise unscathed. Asked to comment on the mandatory use of seat belts for mobile equipment operators, Jeff replied, "I'm a big believer!"

Photo from: DOL/MSHA archive